500.36172VC3

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Yasuko FUKUZAWA et al.

Serial No.: Not yet assigned (Division of 10/326,978 filed December 24, 2002)

Filed: Even date herewith

For: HETEROGENEOUS COMPUTER SYSTEM, HETEROGENEOUS

INPUT/OUTPUT SYSTAM AND DATA BACK-UP METHOD

FOR THE SYSTEMS

Group: 2182

Examiner: Tanh Q. Nguyen

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97 & 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 September 17, 2003

Sir:

• • •

Pursuant to 37 CFR 1.97(b) and 1.98, attached hereto are two (2) forms PTO/SB/O8A equivalent to form PTO-1449 listing the fifty-five (55) references which were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. 10/326,978 filed December 24, 2003, the parent application of the present continuation application.

Pursuant to 37 CFR 1.98(d), copies of these fifty-five (55) references are <u>not</u> being provided with this Information Disclosure Statement because the references were previously cited by or submitted to the Office in the prior applications identified above and the prior applications are being relied upon in the present application for an earlier filing date under 35 USC 120 as required by 37 CFR 1.97(d)(1), and the

references which were submitted to the Office in the prior applications were submitted in compliance with the version of 37 CFR 1.98(a)-(c) in effect as of the filing date of this Information Disclosure Statement as required by 37 CFR 1.98(d)(2).

Pursuant to 37 CFR 1.97(b)(1), this Information Disclosure Statement is being submitted within three months of the filing date of the above-identified national application.

It is respectfully requested that this Information Disclosure Statement be considered.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

Hung H. Bui

Registration No. 40,415

HHB:btd (703) 312-6600

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute	for form 1449A/PTO			Complete if Known		
	INFORMATION DISCI	LOS	JRE	Application Number	Not yet assigned (Division of 10/326,978, filed December 24, 2003)	
	STATEMENT BY APP	LIC	ANT	Filing Date	Even date herewith	
				First Named Inventor	Yasuko FUKUZAWA	
	(use as many sheets as ne	cessa	γ)	Art Unit	2182	
				Examiner Name	Tanh Q. Nguyen	
Sheet	1	of	2	Attorney Docket Number	500.36172VC3	

			U.S. PATENT	DOCUMENTS	
Examiner Initials'	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US- 4,768,150	08/30/1988	Chang et al.	
	AB	US- 4,864,492	09/05/1989	Blakely-Fogel et al.	
	AC	US- 4,941,084	07/10/1990	Terada et al.	
	AD	US- 4,947,367	08/1990	Chang et al.	
	AE	US- 5,051,887	09/24/1991	Berger et al.	
	AF	US- 5,155,845	10/13/1992	Beal et al.	
	AG	US- 5,251,318	10/05/1993	Nitta et al.	
	AH	US- 5,261,080	11/09/1993	Khoyi et al.	
	AL	US- 5,313,617	05/17/1994	Nakano et al.	
	AJ	US- 5,349,656	09/20/1994	Kaneko et al.	
	AK	US- 5,388,013	02/07/1995	Nakamura	
	AL	US- 5,394,534	02/28/1995	Kulakowski et al.	
	AM	US- 5,504,882	04//1996	Chai et al.	
	AN	US- 5,530,819	06/25/1996	Day, III et al.	
	AO	US- 5,535,372	07/09/1996	Benhase et al.	
	AP	U\$- 5,546,536	08//1996	Davis et al.	
	AQ	US- 5,546,541	08//1996	Drew et al.	
	AR	US- 5,568,628	10/22/1996	Satoh et al.	
	AS	US- 5,613,100	03/18/1997	Anezaki	-
	AT	US- 5,630,092	05/13/1997	Carreiro et al.	
	AU	US- 5,655,140	08/05/1997	Haddock Haddock	
	AV	US- 5,664,144	09/02/1997	Yanai et al.	
	AW	US- 5,680,580	10//1997	Beardsley et al.	
	AX	US- 5,680,640	09/01/1995	Ofek et al.	
	AY	US- 5,692,155	11/25/1997	lskiyan et al.	
	AZ	US- 5,708,828	01/13/1998	Coleman	
	BA	US- 5,721,957	02/24/1998	Huang et al.	
	ВВ	US- 5,724,542	03/03/1998	Taroda et al.	

		FOREIGI	PATENT DOC	UMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	
Initials'	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	T⁵
	ВС	JP-04-326420	11-16-1992			
	BD	JP-07-152491	06-16-1995			

Examiner	Date
Signature	Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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Cubatituta	for form 1449A/PTO				Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Application Number	Not yet assigned (Division of 10/326,978, filed December 24, 2003)	
					Filing Date	Even date herewith	
	01711211121112111				First Named Inventor	Yasuko FUKUZAWA	
	(use as many sheets as ne	cessai	n/)		Art Unit	2182	
	(use as many sneeds as nee	, , , , , , , , , , , , , , , , , , ,	,,		Examiner Name	Tanh Q. Nguyen	
Sheet	2	of		2	Attorney Docket Number	500.36172VC3	

			U.S. PATENT I	DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant
Initials'	No.1	Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Figures Appear
	BE	US- 5,734,818	03/31/1998	Kern et al.	
	BF	US- 5,745,789	04//1998	Kakuta	
	BG	US- 5,758,125	05/26/1998	Misinai et al.	
	вн	US- 5,778,189	07/07/1998	Kimura et al.	
· · · · · · · · · · · · · · · · · · ·	ВІ	US- 5,812,843	09/22/1998	Yamazaki et al.	
	BJ	US- 5,835,939	11/10/1998	Kurokawa et al.	
	вк	US- 5,860,088	01/12/1999	Benhase et al.	
	BL	US- 5,875,479	02/23/1999	Blount et al.	
4.	ВМ	US- 5,884,310	03/16/1999	Brichta et al.	
	BN	US- 5,886,841	03/23/1999	Kikuchi	
	ВО	US- 5,903,913	05//1999	Ofer et al.	
	BP	US- 5,978,890	11/02/1999	Ozawa et al.	
	BQ	US- 6,009,498	12/28/1999	Kumasawa et al.	
	BR	US- 6,041,391	03/21/2000	Kanda et al.	
_	BS	US- 6,044,444	03/28/2000	Ofek	
	BT	US- 6,073,209	06/06/2000	Bergsten	
	BU	US- 6,081,826	06/27/2000	Masuoka et al.	
	BV	US- 6,098,129	08//2000	Fukusawa et al.	
	BW	US- 6,108,748	08/22/2000	Ofek et al.	
	ВХ	US- 6,115,797	09/05/2000	Kanda et al.	
	BY	US- 6,529,976	03/ /2003	Fukuzawa et al	

		OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published.	T²
	BZ	IBM Technical Disclosure Bulletin, Vol. 38, No. 06, June 1995, "High Performance Cooperative Count Key Data/Fixed Block Conversion Mechanism", pp. 333-335	
	CA	IBM Technical Disclosure Bulletin, Vol. 35, No. 3, August 1992, "Centralized and Rapid Backup/Restore For Work Lan File Services/VM", pp. 286-289	
	СВ	Fujitsu Sclentific & Technical Journal 31 (1995) June, No. 1. Kawasaki, JP "Storage Management Software for Mainframe and UNIX", By: Keiji Suzuki, et al. pp. 36-44	
	СС	Gelb, "System-managed storage," IBM Systems Journal, Vol. 28, No. 1, 1989, pp. 77-103	

Date
Considered

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